

Amendments to the Specification:

Please replace the paragraph beginning at page 7, line 17 with the following amended paragraph:

Figure 22 is ~~a cross-sectional~~ an end view of the wiper blade of Figure 21.

Please replace the paragraph beginning at page 8, line 19 with the following amended paragraph:

Figure 39 representatively shows an enlarged view of the flexible elastic sealing orifice of Figure 36 ~~in combination with a rigid collar for attaching to the dispenser~~ prior to cutting a continuous slit.

Please replace the paragraph beginning at page 9, line 4 with the following amended paragraph:

Figure 45 representatively shows ~~an enlarged cross sectional view of still another alternate sheet portion of a flexible elastic sealing orifice, similar to the view in Figure 42 taken along the line 7-7~~ the flexible elastic sealing orifice of Figure 36 surrounded by a rigid port.

Please replace the paragraph beginning at page 14, line 23 with the following amended paragraph:

The tray 3 may be made from any similar material to the housing or cover, and it may be the same material or different material from those of components. The tray may have side walls 22, 23, 80 and 81. Walls 22 and 23 correspond to the sides of the dispenser, wall 80 corresponds to the top of the dispenser, and wall 81 corresponds to the bottom of the dispenser. The embodiment of the tray 3' shown in the figures Figure 3 does not have a back wall, although one may be provided if desired as shown in Figure 2 and Figure 7. The side walls may be provided with recesses 24, 25, and 26. These recesses cooperate with protrusions 19, 20 and 21 on the cartridge (19 with 26, 20 with 24 and 21 with 25). In this way the cartridge is securely, yet easily removably held in the dispenser. The tray opening 15 is sized in relation to the cartridge (or the cartridge may be sized in relation to the tray opening) so that the cartridge can easily be slid into and out of the dispenser.

Please replace the paragraph beginning at page 16, line 17 with the following amended paragraph:

Figures 8 and 9 shows a roll of wipes 34 that has a tail 36 of the wipes extending through the gap 4, and further defines the axis of the roll as 37. Stacks or rolls useful with this dispenser or as part of a dispensing system may contain from as little as a few linear inches (or cm) to more than 450 linear inches (11.43 m), to more than linear 600 inches (15.24 m) to more than a thousand linear inches (25.40 m) of wet wipes. The stacks or rolls may have a web of material that may have any number of sheets. Usually, the sheets are separated by perforations that enable the sheet to be easily torn from the web but are strong enough that they will not separate while the web is being pulled from the dispenser. An example of a roll that is particularly useful for applications in the home is one that has a diameter of about 2 inches (50.8 mm) to about 3 inches (76.2 mm), of about less than 5 ½ inches (139.7 mm), and advantageously has a diameter of about 3 inches (76.2 mm) and more advantageously of about 2-7/8 inches (73.0 mm). This roll has from about 400 linear inches (10.16 m) of wipes to about 1000 linear inches (25.40 m) of wipes. Without limitation, each sheet length may be from about 3 inches (76.2 mm) to about 10 inches (254.0 mm) and advantageously are about 4.5 inches (114.3 mm). This roll may further have a density of from about 0.3 g/cc to about 1 g/cc, from about 0.5 g/cc to about 1 g/cc and advantageously about 0.62 g/cc. A particular example of a roll may be one having a diameter of about 2 inches (50.8 mm) and containing about 450 linear inches (11.43 m) of wipe. Another particular example of a roll may be one having a diameter of about 3 inches (76.2 mm) and containing 450 linear inches (11.43 m) of wipes.

Please replace the paragraph beginning at page 21, line 10 with the following amended paragraph:

The dispensing force, which is the force measured in grams force (g) to pull the wet wipes from the dispenser, can also be determined. This force can be measured with a MTS Sintech 1/G test machine equipped with TestWorks 3.10 software. Referring to Figures 34 and 35, such a Sintech test machine 290 and dispenser 1 with the roll of wet wipes 34 are representatively shown in cross-sectional view. In Figure 34 the dispenser is secured in place to platform 294 in a horizontal orientation underneath a clamp 292. The relative orientation of the dispenser to that of the clamp 292 is similar to the way wipes are dispensed from the dispenser during its intended use. The clamp 292 has rubber surfaces which grip substantially the entire width of the tail 36 of the roll of wet wipes 34 placed in the dispenser. For the samples in Tables IV, V and VI, the initial distance 293 between the clamp and the gap of the dispenser is about 8 inches (304.8 mm) and the distance 295 from the middle of clamp 292 to the dispensing gap is about 6 inches (150 mm), such that the distance 297 along the diagonal

trajectory of dispensing wipes between the clamp and the gap is about 10 inches (250 mm). The clamp is attached to the crosshead 296, which pulls the roll upward in direction 298 at a speed of 100 cm/min to a final position as seen in Figure 35. The angle 299 during dispensing of the wipes from the start of a run until the end should be in the range of angles between about 50° and 80°, but may have to be readily varied to mimic these conditions for the sample dispenser depending on structural features of the actual dispenser used for testing. As concerns the angle 299 compared to the dimensions 293, 295 and 297, it is the angle that controls and not the particular dimensions but rather any proportional dimensions that would still achieve the desired range of angles from 50° to 80° for dispensing wipes pursuant to this dispensing force test. When dispensing the wipes for testing, the dispenser should be lined up with the test clamp so that as the test clamp ascends it pulls wipes out of the dispenser between parallel planes defined by the sides of the dispenser. That is, the wipes will be dispensed out of the dispenser rather evenly between the sides so as to not be biased more toward one side than the other. The pull force is measured by a 50 Newton load cell. For each run, the pull force as a function of pull distance curve for pulling 4 to 5 sheets away from a roll is recorded using the TestWorks 3.10 software. Based on the curve, the peak pull force for each run is calculated. The average peak pull force of three runs is used to represent the dispensing force of a given roll. Only the first 12 to 15 sheets from the roll were used to obtain the measurement, i.e. 4 to 5 new sheets for each run.

Please replace the paragraph beginning at page 27, line 26 with the following amended paragraph:

All Samples A through D were tested in a prototype dispenser ~~of applicants'~~ for dispensing wet wipes, according to the protocol discussed herein for determining dispensing force. The dispenser was like that seen in ~~figures~~ Figures 1A to 5, inclusive, and the supporting specification, of the prior U.S. patent application of the present assignee titled, "WET WIPES", U.S. Serial No. 09/659,307 filed September 12, 2000. In particular, without limitation, sample wet wipes were placed in the dispenser and a tail of the sample roll extending out the gap for dispensing. As such, the wiper blade had a thickness along its width (i.e., on either side of fingers 75) of about 0.060 inches and a thickness at fingers 75 of about 0.150 inches. The wiper assembly and blade were configured like that seen and described in Figures 24-29 herewith. The wiper blade was found to engage the wet wipes located in the gap, as determined in a direction across the width of the wet wipes, at most locations of the blade. The wiper blade had an overall width greater than the width of the wet wipes and was made of a

resilient material known as DynaFlex™ G2755 sold by GLS Corp. of McHenry, Illinois, USA and included ½% erucamide wax such as that known by trade name Kemamide™ wax sold by Witco Corp. of Greenwich, Connecticut, USA, that blooms to the surface during use to lower the initial coefficient of friction between the dispensing wet wipes and the wiper blade. The wiper blade having a hardness of 35 (shore A) durometer had: 285 psi tensile strength, 58 pli tear strength, specific gravity of 0.95 g/cc, and 20% compression set (room temperature only). The wiper blade having a hardness of 50 (shore A) durometer had: 490 psi tensile strength, 120 pli tear strength, specific gravity of 1.18 g/cc, and 22%/40% compression set (room temperature/ 70°C). The wiper blade having a hardness of 52 (shore A) durometer had: 615 psi tensile strength, 125 pli tear strength, specific gravity of 0.89 g/cc, and 23%/35% compression set (room temperature/ 70°C).

Please replace the paragraph beginning at page 28, line 20 with the following amended paragraph:

The dispenser and wiper blade were the same for Tables IV, V, and VI, in all regards except for the hardness (as noted in the upper left of each table) and respective related characteristics of the wiper blade recited just-above. The wiper blade described for testing was positioned in the dispenser generally opposite a cartridge positioned like that seen in Figures 9, 10, 34 and 35. As such, the front surface of the wiper blade was approximately parallel to the opposite surface of the cartridge, e.g., the lower lip 31 closest to the apex of angle 43 in Figure 10. Also, the front most surface of ridges 96 (Figures ~~9 and 10~~ 32) would be positioned about adjacent the plane defined by a cover of the cartridge and form a space between the ridges and the inside of the cartridge within the lip 31 to allow the wet wipe to pass between the ridges 96 and the cartridge and then adjacent that between the ridges 96 and the wiper blade and the tray 3. As explained herein, the wiper assembly, including wiper blade, could be in various positions depending on various dispensing characteristics desired, and this just happened to be the one used when testing was conducted.

Please replace the paragraph beginning at page 35, line 27 with the following amended paragraph:

The pull force is measured by a 100 Newton load cell made by MTS, part number 4501008/B. For each run, the pull force as a function of the pull distance curve for pulling one of five similarly prepared sample sheets completely out of the dispenser is recorded using the TestWorks 3.10 software. Based on the curve, the peak drag force for each run is calculated.

The average peak drag force of the 5 runs, which is recorded as Actual Drag Force, is used to represent the drag force of a group of 5 similarly prepared samples. The Drag Relationship or drag relationship is calculated as the value that the Actual Drag Force for a particular Sample Group is less than the Actual Drag Force for Sample Group 1 (i.e., which is the sample Group without any lubricant) expressed as a percentage less value. For example, for Sample Group 3 the Drag Relationship is 34.0% which means that the Actual Drag Force of Sample Group 3 is 34.0% less than the Actual Drag Force of Sample Group 1. $(483.8 - 319.5)/483.8 \times 100 = 34.0\%$

Please replace the paragraph beginning at page 39, line 20 with the following amended paragraph:

Figures 12 through 16 show two ~~an~~ examples of a wiper assembly or wiper 10. Figure 12 shows a back plan view of one wiper assembly, Figure 13 shows a front plan view of the assembly of Figure 12, and Figure 12A shows a cross section of Figure 12 taken at A-A. Figure 16 shows a back plan view of an alternative wiper assembly, Figure 14 shows a top plan view of the assembly of Figure 16, and Figure 15 shows a cross section of Figure 14 taken at A-A. In this example the wiper assembly 10 comprises a chassis 48, and a blade 50 that has fingers 49. In this example the fingers are designed to cooperate with the lowered surfaces 16b (Figure 2A) of the guides on the housing. In this example the blade is made of SANTOPRENE® and the chassis is made of polypropylene.

Please replace the paragraph beginning at page 40, line 1 with the following amended paragraph:

Figures 19 through 23 show ~~an~~ another example of a wiper or wiper assembly 10. Figure 19 is a back plan view of the assembly and Figure 20 is a front plan view. Figure 21 is a back plan view of the wiper blade for use in the assembly of Figure 19. Figure 22 is an end view of Figure 21 and Figure 23 is a back perspective view of Figure 21. In this example the wiper assembly comprises a chassis 73, and a wiper blade 74 (74a shows sections of blade engaging and protruding through the chassis) that has fingers 75. In this example the fingers are designed to cooperate with the lowered surfaces of the guides 16 in the dispenser. In this example the blade is made of SANTOPRENE® and the chassis is made of polypropylene. This example contains raised or thicker areas 97 of the wiper. These raised areas cooperate with the guides 16 on the tray.

Please replace the paragraph beginning at page 40, line 9 with the following amended paragraph:

Figures 24 through 29 show an example of a another wiper assembly. In this example the wiper assembly comprises a chassis 73, and a wiper blade 74 (74a shows sections of blade engaging and protruding through the chassis) that has fingers 75. Figure 24 is a back plan view of the assembly. Figure 25 is a cross section taken at A-A of Figure 25 and Figure 26 is a cross section taken at B-B of Figure 24. Figure 27 is a back-bottom perspective view of the assembly of Figure 24. Figure 28 is a back-top perspective view of the assembly of Figure 24. Figure 29 is a front-top perspective view of the assembly of Figure 24. In this example the fingers are designed to cooperate with the lowered surfaces of the guides 16 in the dispenser. In this example the blade is made of SANTOPRENE® and the chassis is made of polypropylene. This embodiment contains raised or thicker areas 97 of the wiper. These raised areas cooperate with the guides 16 on the tray. This example also includes rounded ridges 96, similar in structure and function to those described in Figure 32 below.

Please replace the paragraph beginning at page 43, line 3 with the following amended paragraph:

Referring to Figures 36-38, there are depicted additional wet wipes dispensing systems of the invention, including various wet wipes dispensers 310, 310', and 310'' having a flexible elastic sealing orifice 320 for pop-up style dispensing of wet wipes. A rigid port 312 can be positioned adjacent an end portion 314 of the dispenser 310. The rigid port 312 surrounds a flexible, rubber-like sheet 322 having a top surface 324 and a bottom surface 326 (Figures 39 40 - 45 44). A continuous slit 340 extends across the top and bottom surfaces 324, 326 of the sheet 322 and between the surfaces 324, 326 so that a wet wipe in a stack of wet wipes 316 can pass from the bottom surface 326 to the top surface 324 or from the top surface to the bottom surface. As seen in Figures 39 40-45, a first portion 328 or surrounding portion 328 of the sheet can have a first thickness. A second portion 332 of the sheet located between the continuous slit 340 and the first portion 328 can have a second thickness which is greater than or less than the first thickness.

Please replace the paragraph beginning at page 43, line 17 with the following amended paragraph:

With reference to Figures 39 40-45, the second portion 332 can be located adjacent the continuous slit 340. The second portion can be located on one side of the slit 340 or on both

opposing sides of the continuous slit. The second portion 332 can extend along only a portion of the continuous slit or its entire length. The continuous slit can have one or more curved portions such as a first curved portion 344 and a second curved portion 348. The first curved portion can have a first orientation relative to a longitudinal axis 342 of the continuous slit. The second curved portion can have a second orientation relative to the longitudinal axis 342. The first orientation can be different than the second orientation, and particularly, the first orientation can be an inverse of the second orientation relative to the longitudinal axis of the slit 342. The continuous slit 340 can have an orientation pattern along its length of A-B-A, such as the convex-concave-convex pattern seen in Figure 39 45 relative to the longitudinal axis 342. More particularly, the continuous slit 340 can have an orientation pattern approximating that of a sine wave. The continuous slit can form two sides 352 substantially uniformly spaced apart from each other along the continuous slit. More particularly, the two sides 352 can be spaced apart from each other by a distance equal to or less than about 20 mils.

Please replace the paragraph beginning at page 44, line 30 with the following amended paragraph:

Referring specifically to Figure 39 45, other examples are discussed. The length 354 of the continuous slit can be from about 20% to about 90% of the width of a wipe and more particularly from about 40% to about 70% of the width of a wipe. The width of the second portion 332 of each side 352 of the slit can be about 1/16 inch to about 1/2 inch and more particularly from about 1/8 inch to about 1/4 inch. The length of the second portion 332 can be about 10% to about 95% of the length 354 of the orifice and more particularly about 60% to about 80% of the length 354. The thickness of the first portion 328 or surrounding portion 328 can be about 20 mil to about 110 mil and more particularly about 35 mil to about 60 mil, e.g., about 50 mil. The thickness of the second portion 332 can be about 20% to about 90% of the thickness of the first portion 328, e.g., about 40 mil. The thickness at the end of continuous slit 340 at the zone 334 (e.g., seen in Figure 40) can be about 100% to about 300% of the thickness of the first portion 328.